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09/738,310	12/18/2000	Kang-Phil Lee	P-113	2256
7590 10/04/2004				
Fleshner & Kim, LLP 14500 Avion Parkway Suite 125 Chantilly, VA 20151		EXAMINER HAN, CLEMENCE S		
		ART UNIT 2665		PAPER NUMBER

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/738,310

Applicant(s)

LEE, KANG-PHIL

Examiner

Clemence Han

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12/18/2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 10-12, 16, 21 and 24 is/are rejected.
- 7) ☒ Claim(s) 2-9, 13-15, 17-20, 22, 23 and 25-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/18/2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. Figure 1–4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: “The above operations for the other E1 links.” (Page 3 Line 3) is not a proper sentence.

Appropriate correction is required.

3. The disclosure is objected to because of the following informalities: “a CPU, interface which interfaces the CPU and the signaling processing unit” (Page 6 Line 19) has a comma which is a typographical error.

Appropriate correction is required.

### ***Claim Objections***

4. Claim 10 is objected to because of the following informalities: “a CPU, interface which interfaces the CPU and the signaling processing unit” in line 10 has a comma which is a typographical error.

Appropriate correction is required.

5. Claim 8, 16, 20 and 27 are objected to because of the following informalities: The specification teaches LNIS (Link Number Increment Signal) on page 12. Claim 8 and 27 use the term "link number increase signal (LNIS). Claim 16 uses the term "link increase signal". Claim 20 uses the term "link number increase signal". Examiner suggest to use a single term to describe the signal from the signaling processing unit to the stream select unit for the clarity.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 11, 12 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 11 recites the limitation "the CPU interface" in line 1. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 12 recites the limitation "the CPU interface" in line 1. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 21 is generally narrative and indefinite, failing to conform with current U.S. practice. It appears to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For example, "each one of the plurality of framers the signaling data stream from the a corresponding link." is not a proper sentence.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 10, 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sproat et al. (US Patent 6,778,503).

Regarding claim 1, Sproat teaches a channel associated signaling (CAS) data processing apparatus of an STM-1 interface block, comprising: a plurality of framers 201, each configured to receive a signaling data stream from at least one communication circuit link; a CAS signaling processor 807-809, coupled to receive the signaling data stream from each of the framers 201, and reformat the signaling data streams into a prescribed format (Column 9 Line 1-6); and a common memory (CM) 810 coupled to receive and store the formatted data

outputted from the CAS signaling processing unit (Column 11 Line 37–42).

Sproat, however, does not teach the signaling processor receiving a start signal from a CPU. Since it is the function of the control processor 801 to control the elements of monitoring processor 800, it would have been obvious to one skilled in the art that the signaling processor 807–809 to receive a control signal from the control processor 801.

Regarding claim 10, Sproat teaches a channel associated signaling (CAS) data processing apparatus of a STM-1 interface block, comprising: a plurality of framers 201, coupled to extract signaling data streams from a plurality of E1 links; a signaling processing unit 807–809, to reformat the signaling data streams inputted from the plurality of framers and output report data in an order of each link (Column 9 Line 1–6); a CPU interface which interfaces the CPU and the signaling processing unit; and a common memory (CM) interface, which interfaces the CAS signaling processing unit with a common memory 810 to provide the report data to the common memory (Column 11 Line 37–42). Sproat, however, does not teach a CPU, configured to output a start signal to control signaling data processing. Since it is the function of the control processor 801 to control the elements of monitoring processor 800, it would have been obvious to one skilled in

the art that the control processor 801 configured to output a control signal to signaling data processing.

Regarding claim 16, Sproat teaches a data processing apparatus for a STM-1 interface block, comprising: a plurality of framers 201, configured to interface 21 E1 links and extract signaling data streams from the E1 links; a CAS signaling processing unit 807–809, which reformats the signaling data streams outputted from the plurality of framers into report data in link order (Column 9 Line 1–6); a common memory (CM) 810 coupled to store the report data outputted from the CAS signaling processing unit (Column 11 Line 37–42); a stream select unit which outputs the inputted signaling data streams in a prescribed order in accordance with a link increase signal outputted from the CAS signaling processing unit (Column 8 Line 42–47); a signaling processing unit which reads the bit stream outputted from the stream select unit and reformats it into the report format (Column 9 Line 1–6); Sproat, however, does not teach a CPU coupled to output a start signal to the CAS signaling processing unit to initiate CAS signaling data processing; a CPU interface which interfaces the CPU and the signaling processing unit; and an address generation unit which generates a write address of the CM in a prescribed order in accordance with the address increase signal outputted from the CAS signaling processing unit. Since it is the function of the control processor 801 to

control the elements of monitoring processor 800, it would have been obvious to one skilled in the art that the control processor 801 outputs a control signal to signaling data processing.

Regarding claim 24, Sproat teaches a channel associated signaling processing unit, comprising: a stream selector, coupled to receive a data stream from a communications channel link (Column 8 Line 42–47); a signaling processing unit, coupled to receive an output of the stream selector and output it in a prescribed format (Column 9 Line 1–6). Sproat, however, does not teach a controller, coupled to provide a control signal to the stream selector and the signaling processing unit, and generate a write address signal to control a storage of an output of the signaling processing unit. Since it is the function of the control processor 801 to control the elements of monitoring processor 800, it would have been obvious to one skilled in the art that the control processor 801 configured to provide a control signal to signaling data processing.

***Allowable Subject Matter***

13. Claims 2–9, 13–15, 17–20, 22, 23 and 25–28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



14. Claims 11, 12 and 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to the signaling in general.

U.S. Patent 6,434,229 to Bradd et al.

U.S. Patent 6,532,240 to Jeong

U.S. Patent 6,751,236 to Groenendaal

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (703) 305-0372. The examiner can normally be reached on Monday-Friday 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.H

Clemence Han  
Examiner  
Art Unit 2665



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